

STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING **ERROR REPORT**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/9/0,208C
Source: 1Fw/6
Date Processed by STIC: 12/7/06

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER VERSION 4.4.0 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):
U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/10/06

Raw Sequence Listing Error Summary

ERROR DETECTED

SUGGESTED CORRECTION

SERIAL NUMBER: 09/9/0, 208C

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleics
 Wrapped Aminos The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor **after** creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2 Invalid Line Length The rules require that a line **not exceed** 72 characters in length. This includes white spaces.
- 3 Misaligned Amino
 Numbering The numbering under each 5th amino acid is misaligned. Do **not** use tab codes between numbers; use **space characters**, instead.
- 4 Non-ASCII The submitted file was **not** saved in ASCII(DOS) text, as **required** by the Sequence Rules. **Please ensure your subsequent submission is saved in ASCII text.**
- 5 Variable Length Sequence(s) contain n's or Xaa's representing more than one residue. **Per Sequence Rules, each n or Xaa can only represent a single residue.** Please present the **maximum** number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6 PatentIn 2.0
 "bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. **This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.**
- 7 Skipped Sequences
 (OLD RULES) Sequence(s) missing. If intentional, please insert the following lines for **each** skipped sequence:
 (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
 (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 This sequence is intentionally skipped
 Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to **include** the skipped sequences.
- 8 Skipped Sequences
 (NEW RULES) Sequence(s) missing. If **intentional**, please insert the following lines for **each** skipped sequence.
 <210> sequence id number
 <400> sequence id number
 000
- 9 Use of n's or Xaa's
 (NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.
 Per 1.823 of Sequence Rules, use of <220>-<223> is **MANDATORY** if n's or Xaa's are present.
 In <220> to <223> section, please explain location of **n** or **Xaa**, and which residue **n** or **Xaa** represents.
- 10 Invalid <213>
 Response Per 1.823 of Sequence Rules, the only **valid** <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is **required** when <213> response is Unknown or is Artificial Sequence. (see item 11 below)
- 11 Use of <220> Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses. **Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown."**
 Please explain source of genetic material in <220> to <223> section or use "chemically synthesized" as explanation. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32), also Sec. 1.823 of Sequence Rules
- 12 PatentIn 2.0
 "bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13 Misuse of n/Xaa "n" can **only** represent a single nucleotide; "Xaa" can **only** represent a single amino acid



IFW16

RAW SEQUENCE LISTING

DATE: 12/07/2006

PATENT APPLICATION: US/09/910,208C

TIME: 08:54:18

Input Set : F:\MM4454.ST25.txt

Output Set: N:\CRF4\12072006\I910208C.raw

see pp 1, 5
Does Not Comply
Corrected Diskette Needed

3 <110> APPLICANT: Hitomi, Jiro
 4 Yamamura, Tokujiro
 5 Kimura, Tatsuji
 6 Yamaguchi, Ken

8 <120> TITLE OF INVENTION: Novel Calcium-Binding Proteins

10 <130> FILE REFERENCE: MM4454

12 <140> CURRENT APPLICATION NUMBER: 09/910,208C

13 <141> CURRENT FILING DATE: 2001-07-20

15 <160> NUMBER OF SEQ ID NOS: 20

17 <170> SOFTWARE: PatentIn version 3.3

19 <210> SEQ ID NO: 1

20 <211> LENGTH: 429

21 <212> TYPE: DNA

22 <213> ORGANISM: calcium binding protein

25 <220> FEATURE:

26 <221> NAME/KEY: exon

27 <222> LOCATION: (48)..(323)

28 <223> OTHER INFORMATION: Amino acid sequence of calcium-binding protein from bovine
 29 amniotic fluid

31 <400> SEQUENCE: 1

32 ctggcattcc acacttctgt gcagaggggt gaacgtagtt tggtaaa atg act aag 56

33 Met Thr Lys

34 1

36 ctg gaa gat cac ctg gag gga atc atc aac atc ttc cac cag tac tcc 104

37 Leu Glu Asp His Leu Glu Gly Ile Ile Asn Ile Phe His Gln Tyr Ser

38 5 10 15

40 gtt cgg gtg ggg cat ttc gac acc ctc aac aag cgt gag ctg aag cag 152

41 Val Arg Val Gly His Phe Asp Thr Leu Asn Lys Arg Glu Leu Lys Gln

42 20 25 30 35

44 ctg atc aca aag gaa ctt ccc aaa acc ctc cag aac acc aaa gat caa 200

45 Leu Ile Thr Lys Glu Leu Pro Lys Thr Leu Gln Asn Thr Lys Asp Gln

46 40 45 50

48 cct acc att gac aaa ata ttc caa gac ctg gat gcc gat aaa gac gga 248

49 Pro Thr Ile Asp Lys Ile Phe Gln Asp Leu Asp Ala Asp Lys Asp Gly

50 55 60 65

52 gcc gtc agc ttt gag gaa ttc gta gtc ctg gtg tcc agg gtg ctg aaa 296

53 Ala Val Ser Phe Glu Glu Phe Val Val Leu Val Ser Arg Val Leu Lys

54 70 75 80

56 aca gcc cac ata gat atc cac aaa gag taggaagctc tttccagcaa 343

57 Thr Ala His Ile Asp Ile His Lys Glu

58 85 90

60 tgtccccaag aagacttacc cttctcctcc ctgaggctgc cttacccgag ggaagagaga 403

62 attaataaac gtactttggc aaagtt 429

invalid response - see item 10 on Error Summary Sheet

If this is an Artificial Sequence, give sources of genetic material in <2207-2223> section

RAW SEQUENCE LISTING

DATE: 12/07/2006

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TIME: 08:54:18

Input Set : F:\MM4454.ST25.txt

Output Set: N:\CRF4\12072006\I910208C.raw

```

65 <210> SEQ ID NO: 2
66 <211> LENGTH: 50
67 <212> TYPE: PRT
68 <213> ORGANISM: Bos taurus
70 <400> SEQUENCE: 2
72 Thr Lys Leu Glu His Leu Glu Gly Ile Ile Asn Ile Phe His Gln Tyr
73 1 5 10 15
76 Ser Val Arg Val Gly His Phe Asp Thr Leu Asn Lys Arg Glu Leu Lys
77 20 25 30
80 Gln Leu Ile Thr Lys Glu Leu Pro Lys Thr Leu Gln Asn Thr Lys Asp
81 35 40 45
84 Gln Pro
85 50
88 <210> SEQ ID NO: 3
89 <211> LENGTH: 8
90 <212> TYPE: PRT
91 <213> ORGANISM: Bos taurus
93 <400> SEQUENCE: 3
95 Ile Phe Gln Asp Leu Asp Ala Asp
96 1 5
99 <210> SEQ ID NO: 4
100 <211> LENGTH: 12
101 <212> TYPE: PRT
102 <213> ORGANISM: Bos taurus
104 <400> SEQUENCE: 4
106 Asp Gly Ala Val Ser Phe Glu Glu Phe Val Val Leu
107 1 5 10
110 <210> SEQ ID NO: 5
111 <211> LENGTH: 9
112 <212> TYPE: PRT
113 <213> ORGANISM: Bos taurus
115 <400> SEQUENCE: 5
117 Thr Ala His Ile Asp Ile His Lys Glu
118 1 5
121 <210> SEQ ID NO: 6
122 <211> LENGTH: 31
123 <212> TYPE: PRT
124 <213> ORGANISM: Bos taurus
126 <400> SEQUENCE: 6
128 Leu Pro Lys Thr Leu Gln Asn Thr Lys Asp Gln Pro Thr Ile Asp Lys
129 1 5 10 15
132 Ile Phe Gln Asp Leu Asp Ala Asp Lys Asp Gly Ala Val Ser Phe
133 20 25 30
136 <210> SEQ ID NO: 7
137 <211> LENGTH: 20
138 <212> TYPE: PRT
139 <213> ORGANISM: Bos taurus
141 <400> SEQUENCE: 7
143 Glu Phe Val Val Leu Val Ser Arg Val Leu Lys Arg Ala His Ile Asp

```

RAW SEQUENCE LISTING

DATE: 12/07/2006

PATENT APPLICATION: US/09/910,208C

TIME: 08:54:18

Input Set : F:\MM4454.ST25.txt

Output Set: N:\CRF4\12072006\I910208C.raw

```

144 1          5          10          15
147 Ile His Lys Glu
148          20
151 <210> SEQ ID NO: 8
152 <211> LENGTH: 20
153 <212> TYPE: DNA
154 <213> ORGANISM: Artificial
156 <220> FEATURE:
157 <223> OTHER INFORMATION: sense primer
160 <220> FEATURE:
161 <221> NAME/KEY: misc_feature
162 <222> LOCATION: (3)..(3) /
163 <223> OTHER INFORMATION: n is a, c, g or t
165 <220> FEATURE:
166 <221> NAME/KEY: misc_feature /
167 <222> LOCATION: (15)..(15) /
168 <223> OTHER INFORMATION: n is a, c, g, or t
170 <400> SEQUENCE: 8
W--> 171 ttngargayc ayytngargg 20
174 <210> SEQ ID NO: 9
175 <211> LENGTH: 20
176 <212> TYPE: DNA
177 <213> ORGANISM: Artificial
179 <220> FEATURE:
180 <223> OTHER INFORMATION: antisense primer
183 <220> FEATURE:
184 <221> NAME/KEY: misc_feature
185 <222> LOCATION: (18)..(18) /
186 <223> OTHER INFORMATION: n is a, c, g, or t
188 <400> SEQUENCE: 9
W--> 189 ttrtgdatrt cdatrtgngc 20
192 <210> SEQ ID NO: 10
193 <211> LENGTH: 23
194 <212> TYPE: DNA
195 <213> ORGANISM: Artificial
197 <220> FEATURE:
198 <223> OTHER INFORMATION: forward primer
200 <400> SEQUENCE: 10
201 ggtggcacga ctctggagc ccg 23
204 <210> SEQ ID NO: 11
205 <211> LENGTH: 24
206 <212> TYPE: DNA
207 <213> ORGANISM: Artificial
209 <220> FEATURE:
210 <223> OTHER INFORMATION: reverse primer
212 <400> SEQUENCE: 11
213 ttgacaccag accaactggt aatg 24
216 <210> SEQ ID NO: 12
217 <211> LENGTH: 440

```

RAW SEQUENCE LISTING

DATE: 12/07/2006

PATENT APPLICATION: US/09/910,208C

TIME: 08:54:18

Input Set : F:\MM4454.ST25.txt

Output Set: N:\CRF4\12072006\I910208C.raw

218 <212> TYPE: DNA *OK because source is listed*

219 <213> ORGANISM: human calcium-binding protein

222 <220> FEATURE:

223 <221> NAME/KEY: exon

224 <222> LOCATION: (22)..(297)

225 <223> OTHER INFORMATION: Deduced amino acid sequence for human calcium-binding protein

227 <400> SEQUENCE: 12

228	ggttaacatt aggctgggaa g atg aca aaa ctt gaa gag cat ctg gag gga	51
229		
230		
232	att gtc aat atc ttc cac caa tac tca gtt cgg aag ggg cat ttt gac	99
233	Ile Val Asn Ile Phe His Gln Tyr Ser Val Arg Lys Gly His Phe Asp	
234		
236	acc ctc tct aag ggt gag ctg aag cag ctg ctt aca aag gag ctt gca	147
237	Thr Leu Ser Lys Gly Glu Leu Lys Gln Leu Leu Thr Lys Glu Leu Ala	
238		
240	aac acc atc aag aat atc aaa gat aaa gct gtc att gat gaa ata ttc	195
241	Asn Thr Ile Lys Asn Ile Lys Asp Lys Ala Val Ile Asp Glu Ile Phe	
242		
244	caa ggc ctg gat gct aat caa gat gaa cag gtc gac ttt caa gaa ttc	243
245	Gln Gly Leu Asp Ala Asn Gln Asp Glu Gln Val Asp Phe Gln Glu Phe	
246		
248	ata tcc ctg gta gcc att gcg ctg aag gct gcc cat tac cac acc cac	291
249	Ile Ser Leu Val Ala Ile Ala Leu Lys Ala Ala His Tyr His Thr His	
250		
252	aaa gag taggtagctc tctgaagctt tttaccagc aatgtcctca atgagggtct	347
253	Lys Glu	
256	ttttttttccc tcaccaaaac ccagccttgc ccgtggggag taagagttaa taaacacact	407
258	cacgaaaagt taaaaaaaaa aaaaaaaaaat tct	440
261	<210> SEQ ID NO: 13	
262	<211> LENGTH: 20	
263	<212> TYPE: DNA	
264	<213> ORGANISM: Artificial	
266	<220> FEATURE:	
267	<223> OTHER INFORMATION: sense primer	
269	<400> SEQUENCE: 13	
270	actatcaaca tcttcacca	20
273	<210> SEQ ID NO: 14	
274	<211> LENGTH: 20	
275	<212> TYPE: DNA	
276	<213> ORGANISM: artificial	
278	<220> FEATURE:	
279	<223> OTHER INFORMATION: antisense primer	
281	<400> SEQUENCE: 14	
282	tctttatcgg catccaggtc	20
285	<210> SEQ ID NO: 15	
286	<211> LENGTH: 15	
287	<212> TYPE: DNA	
288	<213> ORGANISM: Artificial	

RAW SEQUENCE LISTING

DATE: 12/07/2006

PATENT APPLICATION: US/09/910,208C

TIME: 08:54:18

Input Set : F:\MM4454.ST25.txt

Output Set: N:\CRF4\12072006\I910208C.raw

290 <220> FEATURE:

291 <223> OTHER INFORMATION: primer PMN.HP7S 1-15

293 <400> SEQUENCE: 15

294 tactcagttc ggaag 15

297 <210> SEQ ID NO: 16

298 <211> LENGTH: 15

299 <212> TYPE: DNA

300 <213> ORGANISM: Artificial

302 <220> FEATURE:

303 <223> OTHER INFORMATION: primer PMN.HP7A 126-112

305 <400> SEQUENCE: 16

306 ttggaatatt tcatc 15

309 <210> SEQ ID NO: 17

310 <211> LENGTH: 20

311 <212> TYPE: DNA

312 <213> ORGANISM: Artificial

314 <220> FEATURE:

315 <223> OTHER INFORMATION: primer HP7S 7-26

317 <400> SEQUENCE: 17

318 acattaggct gggaagatga 20

321 <210> SEQ ID NO: 18

322 <211> LENGTH: 20

323 <212> TYPE: DNA

324 <213> ORGANISM: Artificial

326 <220> FEATURE:

327 <223> OTHER INFORMATION: primer HP7A 336-317

329 <400> SEQUENCE: 18

330 ggacattgct gggtaaaaag 20

333 <210> SEQ ID NO: 19

334 <211> LENGTH: 92 *same num as page 1*

335 <212> TYPE: PRT

336 <213> ORGANISM: calcium binding protein

339 <220> FEATURE:

340 <221> NAME/KEY: misc_feature

341 <222> LOCATION: (1)..(92)

342 <223> OTHER INFORMATION: Amino acid sequence of SEQ ID No. 1

344 <400> SEQUENCE: 19

346 Met Thr Lys Leu Glu Asp His Leu Glu Gly Ile Ile Asn Ile Phe His

347 1 5 10 15

350 Glu Tyr Ser Val Arg Val Gly His Phe Asp Thr Leu Asn Lys Arg Glu

351 20 25 30

354 Leu Lys Gln Leu Ile Thr Lys Glu Leu Pro Lys Thr Leu Gln Asn Thr

355 35 40 45

358 Lys Asp Gln Pro Thr Ile Asp Lys Ile Phe Gln Asp Leu Asp Ala Asp

359 50 55 60

362 Lys Asp Gly Ala Val Ser Phe Glu Glu Phe Val Val Leu Val Ser Arg

363 65 70 75 80

366 Val Leu Lys Thr Ala His Ile Asp Ile His Lys Glu

367 85 90

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/910,208C

DATE: 12/07/2006
TIME: 08:54:19

Input Set : F:\MM4454.ST25.txt
Output Set: N:\CRF4\12072006\I910208C.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:8; N Pos. 3,15

Seq#:9; N Pos. 18

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:8,9,10,11,13,14,15,16,17,18

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/910,208C

DATE: 12/07/2006

TIME: 08:54:19

Input Set : F:\MM4454.ST25.txt

Output Set: N:\CRF4\12072006\I910208C.raw

L:171 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0

L:189 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0